Environmental Health Surveillance System

WHAT IS THE PUBLIC HEALTH ISSUE?

The National Response Center (NRC) is the sole federal contact for reporting oil and chemical spills in the United States. A total of 31,132 incidents were reported to NRC in 2004 alone. NRC is not a public health agency, and therefore does not collect detailed information on the persons affected or capture all incidents with public health impact.

WHAT HAS ATSDR ACCOMPLISHED?

The Agency for Toxic Substances and Disease Registry's Hazardous Substances Emergency Events Surveillance System (HSEES) is the key source of data on the public health impact of acute hazardous substance releases (exclusive of petroleum). The purpose of HSEES is to reduce injury and death resulting from releases of hazardous substances. The surveillance system began with 5 states in 1990 and now has 15. It collects information on acute hazardous substance releases from multiple sources including the NRC, the U.S. Department of Transportation, and other federal, state, and local agencies and is the first system in CDC/ATSDR to deploy a state-of-the-art web-browser data entry system. The data are in one central location and can be accessed as soon as they are entered, which is usually within 48 hours of the release. The HSEES data entry program is accessed easily by authorized users connected to the Internet.

In calendar year 2005 ATSDR will publish a report of the surveillance findings for 2003 HSEES data. It includes information on 9,105 hazardous substance events and 1,835 injured persons (51 of whom died). The report shows that when handling toxic substances such as chlorine, employees need to use respiratory protection and exercise care. Hospitals need to be prepared to handle injured and contaminated patients, without causing further injury or exposing others in the hospital to toxic substances.

Participating states use HSEES data to develop prevention activities. Many activities target areas with the most spills (e.g., highly industrialized areas or heavily traveled transportation routes) and industries with frequent spills (e.g., chemical manufacturers, transportation, and agricultural industries). Other activities have targeted frequently spilled substances (e.g., ammonia, chlorine, mercury, and pesticides) and frequently injured population groups (e.g., employees or first responders). Additionally, HSEES data and reports have been cited in preventative legislation. Local emergency planning committees use HSEES data for strategic placement of Hazmat teams, prevention, and planning.

WHAT ARE THE NEXT STEPS?

ATSDR will release an HSEES public use data set on its Web site in 2005 to provide the public, industry, and researchers access to HSEES data. Awareness and prevention activities, including journal articles, national conferences, and reports, will continue. ATSDR will incorporate recommendations from a recent peer review of the HSEES system. ATSDR intends to improve data timeliness, including continuing instantaneous data entry pilots by responding field workers, to support counterterrorism programs.